

WHAT IS CLAIMED IS:

1. An observation optical system comprising:
an objective optical part which forms an image
of an object, and has a first lens unit with a
5 negative power and a second lens unit with a positive
power arranged from an object side in the order named,
said second lens unit being capable of moving in a
direction including a component perpendicular to an
optical axis to stabilize an image;
10 an image inverting part which converts an image
formed by said objective optical part into an erect
image; and
an eyepiece optical part which guides the erect
image converted by said image inverting part to an
15 observer.

2. A system according to claim 1, wherein
letting F_o be a focal length of the overall objective
optical part, f_1 be a focal length of said first lens
20 unit, f_2 be a focal length of said second lens unit,
and D_{12} be a distance between said first lens unit
and said second lens unit, conditions defined by

$$0.1 \leq -F_o/f_1 \leq 1.0$$

$$1.1 \leq F_o/f_2 \leq 3.0$$

- 25 $0.01 \leq D_{12}/F_o \leq 0.2$
are satisfied.

3. A system according to claim 1, wherein said second lens unit can move in the direction perpendicular to the optical axis.

5 4. A system according to claim 1, wherein said second lens unit can swing about a point on the optical axis.

10 5. A system according to claim 4, wherein letting F_o be a focal length of the overall objective optical part, f_1 be a focal length of said first lens unit, f_2 be a focal length of said second lens unit, D_{12} be a distance between said first lens unit and said second lens unit, and T_c be a distance from a
15 vertex of an object-side surface of said second lens unit to a swing center (when an image direction is a positive direction), conditions defined by

$$0.1 \leq -F_o/f_1 \leq 1.0$$

$$1.1 \leq F_o/f_2 \leq 3.0$$

20 $0.01 \leq D_{12}/F_o \leq 0.2$

$$0.1 \leq T_c/F_o \leq 0.7$$

are satisfied.

25 6. A system according to claim 1, wherein said first lens unit consists of one positive lens element and one negative lens element, and said second lens unit consists of one positive

lens element.

7. A system according to claim 6, wherein said
first lens unit has a positive lens element with a
5 convex surface facing the object side and a negative
lens element with a concave surface facing the image
side which are arranged from the object side in the
order named.

10 8. A system according to claim 6, wherein said
first lens unit consists of a lens component formed
by cementing the positive lens element to the
negative lens element.

15 9. A system according to claim 6, wherein said
second lens unit consists of a positive lens element
having a convex surface facing the object side.

20 10. A system according to claim 1, wherein
letting β be a magnification of said second lens unit,
an antivibration sensitivity S_i of said second lens
unit satisfies a condition defined by

$$|S_i| = |1 - \beta| > 1$$

25 11. An observation device comprising said
observation optical system defined in claim 1.